

REMARKS

By this Amendment, claim 3 is amended to change its dependency, and claims 1, 4 and 5 are canceled, without prejudice to or disclaimer of the subject matter recited therein. Therefore, claims 2, 3, 6 and 7 are pending in this application. No new matter is added by this Amendment. Reconsideration of the application is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments are only to change the dependency of claim 3 and to cancel claims 1, 4 and 5; and (c) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

The Office Action objects to claims 4 and 5 for informalities. As claims 4 and 5 are canceled by this Amendment, this object is moot. Withdrawal of the objection is respectfully requested.

The Office Action rejects claims 1-7 under 35 U.S.C. §103(a) over U.S. Patent No. 5,586,055 to Ng et al. (Ng) in view of U.S. Patent No. 6,064,418 to Shimizu et al. (Shimizu). This rejection is moot with respect to canceled claims 1, 4 and 5 and is respectfully traversed with respect to the remaining claims.

Claim 2 recites, *inter alia*, slicing the beam profiles at a predetermined level and determining distance between the light-emitting elements at the joint of the light-emitting chips from distance between median points of the sliced plane. This feature, for example, is shown in Fig. 5.

The Office Action admits that Ng does not disclose this feature, but alleges that Shimizu teaches this feature in Figs. 18A and 18B. However, Figs. 18 A and 18B only show

the position of the LEDs in the array and their optical intensity. See col. 10, line 62-65.

Shimizu does not specifically teach or suggest slicing the beam profiles at a predetermined level and determining distance between the light-emitting elements at the joint of the light-emitting chips from distance between median points of the sliced plane, as recited in claim 2.

In addition, the Office Action states that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the step of determining the light intensity profile of the LED arrays in the measurement of the spacing between adjacent LED elements in the device of NG so as to select the peak of the light intensity profile as reference point for determining the above-mentioned spacing as taught by Shimizu since both Ng and Shimizu suggest to use the peak of the light intensity of the LED to measure their spacing. However, neither Ng nor Shimizu suggests any advantage in Shimizu's teaching over Ng's teaching with respect to determining the spacing of LEDs by using the peak of light intensity of the LEDs. That Ng and Shimizu teach a similar method is a fact, but does not provide a proper motivation for a skilled person to combine Ng and Shimizu. Such a combination therefore appears to be based on impermissible hindsight knowledge gained from Applicants' disclosure.

At least for these reasons, Applicants respectfully submit that claim 2 is patentable over Ng and Shimizu.

Independent claims 6 and 7 each recite a controller that determines beam profiles of the plural light-emitting elements including light-emitting elements at a joint of the light-emitting chips, and determines distance between the light-emitting elements at the joint of the light-emitting chips according to distance between median points of sliced plane made by slicing the beam profiles at a predetermined level. As discussed above, neither Ng nor Shimizu teaches the recited slicing. Therefore, claims 6 and 7 are patentable over Ng and Shimizu.

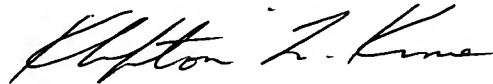
Claim 3 is patentable at least for its dependence on claim 2, as well as for the additional feature it recites.

Therefore, Applicants respectfully request withdrawal of the rejection.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Petition for Extension of Time

Date: April 10, 2006

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